

WEA400 Series - Indoor and Outdoor Dual Band 802.11ac Wi-Fi Access Points



Designed with Enterprise Mobility in Mind

OVERVIEW

The Samsung WEA400 series access points enable the next generation of enterprise Wi-Fi networking, offering improved user experience with noticeably higher throughput, more capacity, and less interference, while providing easy and reliable management.

The WEA400 series includes a range of indoor and outdoor 802.11ac Wi-Fi access points supporting a wide variety of deployment scenarios for small and medium size businesses to the largest enterprise as well as public venue environments.

30%
More
Coverage

40%
More
Throughput

50%
More
Concurrent
Voice Calls

30%
CAPEX
Savage

With a combination of 802.11ac standard and Samsung's innovative smart antenna solution, patented traffic schedule technology, and built-in security modules, the Samsung 400 series access points provide enterprises secure and seamless connectivity, greater performance, and richer communication experience to a large number of devices being used simultaneously. Higher network speeds of WEA400 series allow users to get on and off the network quickly, which conserves batteries and maximizes airtime for all user devices.

Key features

Reliable Connectivity

Guaranteed throughput fairness, with Samsung APs maximizing cell throughput by 40% or more compared to competitors.

Guaranteed Coverage

Optimal RF pattern with multiple physical antennas to minimize dead zones, delivering 30% greater coverage by automatically selecting a beam for each environment.

Optimized Mobility

Adoption of LTE handover for seamless voice calls and video streaming, and guaranteed throughput two-times more when compared with traditional Wi-Fi handover.

Richer Communications

Patented traffic scheduling technology that increases concurrent voice over Wi-Fi capacity by 50% over competitors by efficiently transmitting voice frame to multiple devices.

Embedded Security

Dedicated security RF monitoring chip embedded independently of the RF service chip for continuous real-time monitoring of data service.

Lower Total Cost of Ownership

Maximum RF sensing performance coupled with low design costs through automatic adjustment of transmission power and channel switches.

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Simplified Management

WEA 400 series access points can either operate as standalone devices or can be centrally managed by high performance controllers optimally designed to support both small and mid-scale enterprise deployment (WEC 8050) as well as large scale deployments (WEC 8500).

In addition, a complementary Samsung's Wireless Enterprise Manager (WEM) provides operational convenience by enabling system administrators to monitor failure situations anywhere, at any time and quickly resolve them via integrated wire/wireless remote management using their smartphones.



KEY ENABLING TECHNOLOGIES

INTELLIGENT BEAM SELECTABLE ANTENNA (IBSA)TM

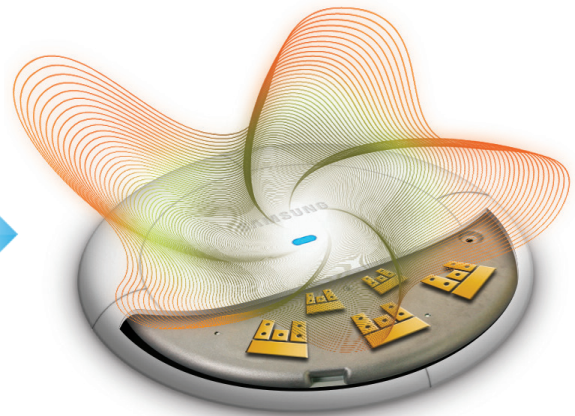
The 400 series APs use Samsung's unique Intelligent Beam Selectable Antenna (IBSA) technology to facilitate networks where multiple devices are requiring concurrent access.

With a total of 15 antennas available on 400 Series APs, three antennas are used for monitoring, and the remaining 12 provide optimized RF patterns, selecting a beam for each environment. By optimizing its radio frequency (RF) pattern, coverage is extended, sensitivity is improved, and speed and reliability are uncompromised. IBSA enables minimization of dead zones and extension of service coverage resulting in antennas accurately receiving signal from a mobile device with weak Tx power even from long distances.

The receiving sensitivity is 2 dB higher than competing solutions in the market.

AIRMOVE

Samsung's AirMove uses LTE handover technology that allows the AP controller to determine the best timing and target AP for the handover. This way, users enjoy seamless service during voice calls and video, and a greater throughput that is double of what legacy Wi-Fi handover guarantees.



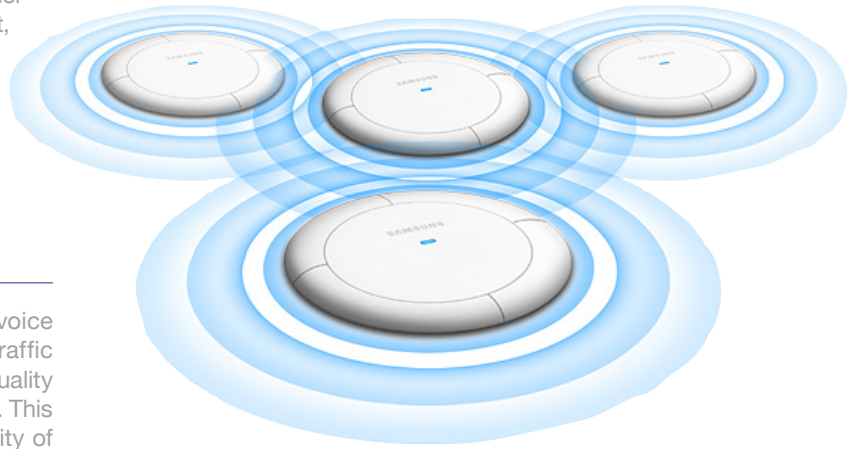
AIREQUALIZER

Samsung's Traffic Schedule technology ensures the most optimized Wi-Fi service by allocating equal airtime to multiple devices. This technology guarantees airtime fairness where multiple users need to simultaneously connect to the network. It also allows seamless service even in an environment with multiple devices with different traffic types, without compromising service quality.



SELF-ORGANIZING NETWORK (SON)

By adding LTE technology to the existing Tx power and channel optimization technology through wireless resource management, cell configuration and coverage are automatically optimized to suit specific network requirements. This allows a high level of quality management during operations, dramatically shortening design schedule as well as reducing design cost.



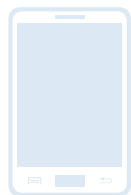
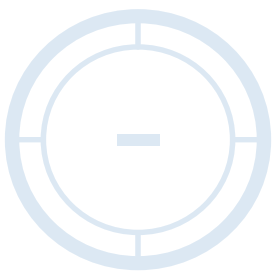
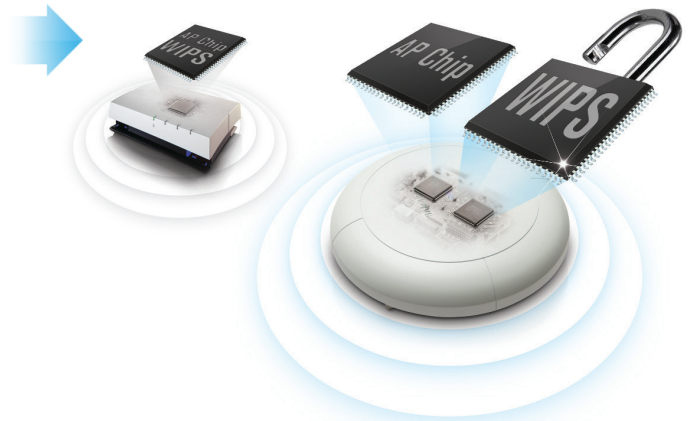
VOICE AWARE TRAFFIC SCHEDULING (VATS)

Samsung's patented technology, VaTS, efficiently sends voice frames to multiple devices using mobile communication traffic scheduling technology. This means that there is no voice quality degradation due to an increase of devices in concurrent calls. This technology enhances the concurrent call capacity and quality of voice service.



EMBEDDED WIRELESS INTRUSION PREVENTION SYSTEM (WIPS)

Samsung access points combine the advantages of the overlay and time slice split configurations and implement a dedicated security RF monitoring chip embedded independently of the RF service chip for continuous real-time monitoring of data service. This maximizes RF sensing performance of the infrastructure and reduces the need for additional security equipment.



¹. Available with Access points deployments with controller only

². Availability depends on smartphone model

SPECIFICATIONS



Specifications	WEA412i	WEA403i	WEA403e	WEA453e
Deployment Type	Indoor	Indoor	Indoor	Outdoor. IP67 certified, which authenticates that the device is dustproof and can withstand water immersion up to one meter for 30 minutes.
Physical Rate	867 Mbps	1.3 Gbps in 5GHz Band	1.3 Gbps in 5GHz Band	1.3 Gbps in 5GHz Band
Antennas	Internal type	Internal type	External type, Dualband	External type Separate 2.4G, 5G Antenna
Ideal For	Mid to High Density Environment such as corporate offices, K-12 education institutions, health care facilities, hotels, and university stadiums.	High density environment such as stadiums and arenas, conference centers, public venues, and university campuses.	High density environment such as stadiums and arenas, conference centers, public venues, and university campuses.	High density environment such as such as parking lots, smart cities, open public venues, and university campuses.

Features					
Wireless	Standard	802.11a/b/g/n/ac	802.11a/b/g/n/ac	802.11a/b/g/n/ac	
	# of radio	Dual concurrent radio	Dual concurrent radio	Dual Concurrent Radio, 3T3R	
	Frequency	2.4 GHz, 5 GHz	2.4 GHz, 5 GHz	2.4 GHz, 5 GHz	2.4 GHz, 5 GHz
	Antennas	Internal type	Internal type	External type	Internal and External Type
	MIMO	2 x 2 MIMO, 2 spatial streams	3 x 3 MIMO, 3 spatial streams	3 x 3 MIMO, 3 spatial streams	3 x 3 MIMO, 3 spatial streams
H/W	Spectrum Analysis	Yes (Time sharing)	Yes	Yes (Time Sharing)	
	Network I/F	2 GE (RJ45), 1 console (RJ45)	2 GE (RJ45), 1 console (RJ45)	2 GE (RJ45), 1 Console (RJ45)	2 GE (RJ45), 1 Console (RJ45)
	PoE	802.3af/at	802.3at	802.3at	802.3at
Dimension	Environment Class	Indoor	Indoor	Indoor	Outdoor, IP66, IP67
	Diameter / Height	205 mm / 45 mm	205 mm / 45 mm	205 mm / 45 mm	267 mm / 184 mm / 57.5 mm
	Weight	790 g	860 g	870g	2,600 g
Security	Standard	802.11i, WPA/WPA2	802.11i, WPA/WPA2	802.11i, WPA/WPA2	802.11i, WPA/WPA2
	Multi SSID	Maximum 16	Maximum 16	Maximum 16	Maximum 16
	# of Multi VLAN over SSID	Maximum 1,024	Maximum 1,024	Maximum 1,024	Maximum 1,024
	AP-APC Tunnel	CAPWAP/DTLS	CAPWAP/DTLS	CAPWAP/DTLS	CAPWAP/DTLS
	Remote AP	Yes	Yes	Yes	Yes
	Encryption	WPA-TKIP, WPA2-CCMP	WPA-TKIP, WPA2-CCMP	WPA-TKIP, WPA2-CCMP	WPA-TKIP, WPA2-CCMP
	Authentication	EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC,EAP-SIM, EAP-AKA, EAP-AKA Prime, EAP-FAST	EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC,EAP-SIM, EAP-AKA, EAP-AKA Prime, EAP-FAST	EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC,EAP-SIM, EAP-AKA, EAP-AKA Prime, EAP-FAST	EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC,EAP-SIM, EAP-AKA, EAP-AKA Prime, EAP-FAST
	Rogue AP Detection	Yes (Time sharing)	Yes	Yes	Yes
	WIPS	-	Dedicated RF and security monitoring module in AP	Dedicated RF and security monitoring module in AP	-
Multimedia	QoS	802.11e	802.11e	802.11e	802.11e
	WMM	Yes	Yes	Yes	Yes
	WMM Power Save	Yes	Yes	Yes	Yes
Management	Operation	Controlled mode, Stand-alone mode	Controlled mode, Stand-alone mode	Controlled mode, Stand-alone mode	Controlled mode, Stand-alone mode
	Supported WLAN Controller	WEC 8500 Series WEC 8050 Series	WEC 8500 Series WEC 8050 Series	WEC 8500 Series WEC 8050 Series	WEC 8500 Series WEC 8050 Series
Certification	Wi-Fi Certified	WPA/WPA2, WMM, WMM-PS	WPA/WPA2, WMM, WMM-PS		WPA/WPA2, WMM, WMM-PS
	Certification	KC, FCC/cUL, CE, IC	KC, FCC/cUL, CE, IC	KC, FCC/cUL, CE, IC	KC, FCC/cUL, CE, IC

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